



The Storm Water Pollution Prevention Bulletin is prepared by the Storm Water Compliance Review Task Force to aid all projects and operations in maintaining compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements.

Construction Contractual Requirements for New Products and Methods for Erosion and Sediment Control



Erosion and sediment control technology is expanding as increased awareness of the goals of the National Pollution Discharge Elimination System (NPDES) grows. New products and methods are becoming available as alternatives to the standard practices.

Effectiveness, installation time, and durability all affect the cost effectiveness of erosion and sediment control activity. Lower cost with better results is the selling point of any new idea. This bulletin will focus on the contractual requirements to implement new erosion and sediment control practices and identify some of the new ideas, products, and methods available.

CONTRACT REQUIREMENTS

The use of new methods is encouraged, but they must be implemented carefully. Erosion and sediment control practices that are not included in the Construction Contractors Guide of the Caltrans Storm Water Quality Handbook may be used by the contractor to achieve the pollution control objectives. But, as stated in Section 5 of the Handbook, those practices not specified in the Handbook may not be used to replace minimum erosion and sediment control requirements. Furthermore, these new practices must be approved by the Resident Engineer, and additional construction details and/or manufacturer's data sheets must be included in the WPCP/SWPPP.

Listed below is a summary of new products and methods as well as the unproven claims made by the manufacturer.

NEW LINEAR BARRIERS

Triangular silt dikes are reusable barriers that are simply "laid in place." When dry, the barrier is claimed to be lightweight and durable and will conform to curves (for placement on the contour); but when wet, the barrier saturates and "seals itself" to the soil.

Continuous berms are linear barriers placed by a specialty machine. The manufacturer claims to produce 10 to 50 feet of 12" x 12" fabric-encapsulated berm per minute. This product can be filled with sand or rock.

Biodegradable silt fence is available for use and has been showing up on construction sites in northern California. This product is installed and works like a standard silt fence, but is environmentally friendly.



Continuous Berm Barrier

NEW DROP INLET PROTECTION

Several companies have begun production of reusable drop inlet filters made of geotextile fabric. The filters are available in different fabric densities to accommodate various flow conditions. Sized for standard grate openings, some of the filters are positioned inside the drop inlet allowing traffic to pass without damage. The estimated life span of these products is three years with proper maintenance.

SOIL STABILIZERS

Some chemical stabilizers are now claiming "set times" as little as three hours. These products could improve the contractor's ability to meet contract provisions during the wet season by protecting active, soil-disturbed areas at the end of each working day.

Biodegradable soil stabilization blankets for non-active slopes offer vegetation establishment in as little as two weeks during the wet season. It should be noted that the contractor may be restricted by district-specific requirements on the seed types allowed on a project which may directly affect the establishment period of the blanket.



Established Biodegradable Blanket

Further information on any of these products can be found by contacting your local contractors' supply house. A search of the internet using "erosion control" as the key words is also a great source for information.

Additional information is available in the Caltrans Storm Water Quality Handbooks. Questions or comments may be directed to:

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